QCD sum rule from lattice correlators

Thursday, 6 August 2020 15:00 (20 minutes)

We propose a method to compute a spectral sum appearing in the QCD sum rule from lattice correlators.
This spectral sum corresponds to the Borel transform of the vacuum polarization, which widely appears in the phenomenological study.
We discuss how to compute it from two-point correlation functions on the lattice.
We measure it for three lattice spacing and confirm that the method gives results consistent with operator product expansion.

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